



May 7, 2013

**Digital Billboards, Driver Safety and the Michigan House of Representatives**

Dear Honorable Member of the House Transportation Committee,

During last week's committee hearing regarding HB 4629, a bill to reform the Michigan Highway Advertising Act – the law regulating billboards along our highways, certain statements were heard regarding the safety of digital billboards. Please, indulge me for a brief but succinct history lesson about digital billboards, driver safety and the Michigan House of Representatives.

The Michigan House of Representatives examined the issue of Digital Billboard safety in 2009. At that time this body engaged in an exhaustive fact-finding process, hearing testimony from several experts on both sides of the issue. In the end, the ***Michigan House concluded that Digital Billboards did not pose a risk to drivers*** rejecting a measure, multiple times, to place a moratorium on future construction of this category of billboard.

The OAAM understands that you may have not had the benefit of the due diligence performed in 2009 and would like to offer the attached summary of the numerous studies conducted over the years examining digital billboards and driver safety. As you will observe, every study conducted both “eye-glance” and “statistical review of crash data” has concluded that Digital Billboards pose NO RISK to drivers. These studies can be made available upon your request.

The OAAM specifically did not address the issue of digital billboard safety in testimony before committee last week assuming that by the previous action of this body the answer to the question raised by opponents regarding the safety of digital billboards was a settled matter.

Thank you, for your continued efforts to save Michigan taxpayers \$ 100 million in Federal road funds and providing the Michigan outdoor advertising industry with predictable and reliable regulation - founded in facts and objective research.

Sincerely,

Bill Jackson  
Executive Director, Outdoor Advertising of MI

# What Does the Traffic Accident Data Say?

Traffic accident data is a valued, standard tool for policy makers. The National Highway Traffic Safety Administration (NHTSA) sums up this point:

***“Traffic records are the basis for defining, managing, and evaluating traffic safety and performance.”***

***Did you know that crash-data studies show no increase in accidents near digital billboards?***

***Industry studies in five areas found:***

- There is no statistically significant relationship between accidents and digital billboards; digital billboards are “safety neutral”
- More than 160,000 accident records in proximity to 69 digital billboard faces were analyzed
- ***Different circumstances . . . conclusion the same***
  - Size of digital billboards were different:
    - Standardized bulletins in Cuyahoga County (14'x48')
    - Standardized bulletins in Rochester (10'6"x36')
    - Standardized posters in Albuquerque (12'x24')
    - Variety of bulletins, posters, and miscellaneous sizes in Reading and Richmond
  - Digital billboard locations were different:
    - Along **Interstates** in the Cuyahoga County
    - Along **local roads** in Rochester and Albuquerque
    - Along **local roads and expressways** in Reading
    - Along **Interstates and local roads** in Richmond
  - Combined traffic counts exceed one-half billion cars per year
- ***The age of driver is a neutral factor***
  - Younger drivers (under 21) show no increases in accident rates
  - Older drivers (over 65) show no increases in accident rates
  - *The researchers said: “For comparisons of younger, older or nighttime drivers, there are no increases in accident rates near these digital billboards”*
- ***Time of day is a neutral factor***
  - Daytime and nighttime comparisons show no increases in rates in the area surrounding the digital billboards

## Areas studied:

- **Cuyahoga County, OH (2007)**
  - Accident reports **3 years** before and after installation of digital billboards
  - **7 digital billboards** located along Interstates
  - **33,000 accident records** from the Ohio DOT
- **Rochester, MN (2009)**
  - Accident reports spanning more than **4 years** before and after installation
  - **5 digital billboards** located along local roads
  - **18,000 accident records** from the local police department
- **Cuyahoga County, OH (2009)**

This study updated the 2007 report, evaluating more time and data:

  - Accident reports **4 years** before and after installation
  - **7 digital billboards** along Interstates (same structures as 2007 study)
  - **60,000+ accident records** from the Ohio DOT
- **Albuquerque, NM (2010)**
  - Accident reports spanning **3½ years** before and after the installation
  - **17 digital billboards** located along local roads
  - **7,000+ accident records** from the local police department
- **Reading, PA (2010)**
  - Accident reports spanning **4 years** before and after installation
  - **26 digital billboard faces** on 20 structures along expressways and local roads
  - **Used Empirical Bayes Method to evaluate similar roadways without digital billboards**
  - FHWA is conducting a eye glance duration and frequency study in this area
  - **35,000 accident records** from Pennsylvania DOT and local police
- **Richmond, VA (2010)**
  - Accident reports spanning **7 years** before and after installation
  - **14 digital billboard faces** on 10 structures along Interstates and local roads
  - **Used Empirical Bayes Method to evaluate similar roadways without digital billboards**
  - FHWA is conducting a eye glance duration and frequency study in this area
  - **Approximately 40,000 accident records** from Virginia DOT, Henrico County, and local police

The consistent outcome from these studies:

*Digital Billboards are NOT Linked to Accidents*

# Digital Billboards and Traffic Safety

## Key Points from FHWA Research



The Federal Highway Administration (FHWA) initiated the Science Applications International Corporation (SAIC) study in 2007.

This study was aimed at determining whether digital billboards posed an unsafe driver distraction.

- ✓ This determination was to be made based on how long drivers took their eyes off the road when in the presence of digital billboards.

FHWA emphasized that the study would employ highly accurate state of the art research methodology and ensured a high level of confidence in the eventual findings.

The study was completed in early 2010.

- ✓ However, FHWA ultimately sequestered the SAIC study and has internal review underway to address adverse peer review comments released to the public in Feb. 2012.

*As of July 2012, Nelson Castellanos, FHWA's Office of Real Estate Services Director has announced at several state/federal regulator meetings that there are no plans to release the report in the near future.*

## Results from the FHWA study indicated the following:

*Drivers' glances at billboards were exceedingly brief, suggesting that the displays aren't a threat to traffic safety.*

According to the National Highway Traffic Safety Administration (NHTSA), safety concerns arise when a driver's eyes are diverted from the roadway by glances that continue for more than 2.0 seconds.

None of the drivers diverted their attention from the road longer than 1.3 seconds.

- ✓ 35% below the level of safety concern.

The average glance durations were 0.07 seconds and 0.097 seconds in the two markets studied.

- ✓ 96% and 97% respectively below the level of safety concern.

The only factor that reduced driver gazes to the road ahead was the visual complexity of the overall environment, but none of the glances exceed 1.3 seconds.

- ✓ 35% below the level of safety concern.

**Other than the FHWA study, the Virginia Tech Transportation Institute (VTTI) and Tantal Associates research studies are the only published research that measures the impact of digital billboards in the U.S.**

*Both of these studies also concluded that digital billboards do not pose a safety concern.*

## Key Points from VTTI Research



This study measured eye glances in the presence of digital and conventional billboards.

- ✓ i.e. how long drivers took their eyes off the road when in the presence of digital billboards.

## Results from the VTTI study concluded the following:

*Digital billboards are "safety neutral".*

- ✓ Drivers did not glance more frequently in the direction of digital billboards than in the direction of other event types.
- ✓ The mean glance towards digital billboards was less than one second.

# Digital Billboards and Traffic Safety



## Key Points from Tantala Associates Research



These studies analyzed crash data before and after deployment of digital billboards in five different markets.

- ✓ Cleveland, OH... Rochester, MN... Albuquerque, NM... Reading, PA... Richmond, VA
- ✓ Over 160,000 government accident records spanning up to eight years in locations with digital billboards were examined.

### Results from the Tantala Associates study concluded the following:

***"Digital Billboards are not linked to accidents," said Michael Tantala of Tantala Associates LLC.***

- ✓ The accident data does not show a statistical relationship between vehicular accidents and billboards (both digital and conventional billboards).
- ✓ The number and rate of vehicular accidents did not increase after the installation of digital billboards.
- ✓ Using Empirical Bayes methodology, it was determined that the accident statistics near billboards are comparable to the accident statistics on similar sections of highway without billboards.

## Other Government Research



### Findings from other government entities:

***All found no relationship between digital billboards and traffic accidents.***

"I have no indication that digital billboards pose any safety threat to the traveling public. With the number of digital signs that are currently in El Paso, both of the business and billboard type, and the long time in which they have been present in our city, any safety issues surely would have surfaced by now. Those in El Paso who claim there are safety problems with the digital billboards are ignoring the evidence."

- ✓ Richard D. Wiles, El Paso County Sheriff, El Paso, TX (7/13/09)

Our study has turned up no accidents reported to local police in the vicinity of the digital signs we've been monitoring."

- ✓ James R. Barrett, Regulatory and Compliance Manager, Virginia DOT (9/24/07)

"Despite being placed on heavily traveled city streets, there has not been one accident attributed to a driver being distracted by the billboard."

- ✓ Gary Mulleneaux, Rochester Police Department, Rochester, MN (12/2/08)

The study based on the period of review (six months after installation of digital billboards) does not highlight a problem with the digital billboards. Also, as of August 28, 2007, the South Carolina Department of Transportation (SCDOT) has not received any complaints in regard to the digital billboards."

- ✓ Dipak M. Patel, SCDOT Deputy State Highway Engineer (7/13/09)

For additional information, contact:  
The Outdoor Advertising Association of America, Inc.  
Washington, DC Headquarters  
1850 M Street, NW, Suite 1040  
Washington, DC 20036  
Phone: (202) 833-5566 | Fax: (202) 833-1522  
[www.oaaa.org](http://www.oaaa.org)